EXHIBIT 1

UNITED STATES DISTRICT COURT CENTRAL DISTRICT OF CALIFORNIA WESTERN DIVISION

ASHAMAD I	PINCHEM.
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Case No. **2:15-cv-06518**

Plaintiff,

v. **REGAL MEDICAL GROUP, INC**,

Defendant.

RULE 26(a)(2)(b) WRITTEN REPORT OF JEFFREY A. HANSEN

EXPERT REPORT OF JEFFREY A. HANSEN

- 1. My name is Jeffrey A. Hansen. I am an adult over the age of 18, a resident of the state of California. Unless indicated otherwise, I have personal knowledge of each of the matters stated herein, and if called to testify I could and would testify competently about them.
- 2. I was asked to prepare this written expert report by Plaintiff's counsel in the above-captioned matter, Kemnitzer, Barron & Krieg, LLP, in support of Plaintiff's Designation of Expert Witnesses Pursuant to Fed. R. Civ. P. 26(a)(2)(b).
- 3. I have been retained in this case at a rate of \$300 per hour, for all services rendered, and \$380 per hour for depositions.

Experience and Credentials.

- 4. I am the principal of Hansen Legal Technologies, Inc. My firm is in the business of handling Information Technology, including investigations and analysis of electronic data. I have served as an expert or consultant in more than 150 Telephone Consumer Protection Act ("TCPA") class action lawsuits, and as an expert or consultant in numerous other civil cases.
- 5. With regard to my experience as an expert and consultant in legal matters, generally, I have frequently served as an expert witness and consultant to law firms in conducting computer forensic analysis. I have also assisted in electronic discovery issues.
- 6. Specific to this case, my firm was retained to assist Plaintiff's counsel in evaluating and analyzing the telephone dialing systems used by Defendant Regal Medical Group in sending SMS messages to Plaintiff. I have also been retained to assist Plaintiff and his counsel in evaluating and analyzing electronic data related to the calls and other electronic data associated with computer systems and/or telephone dialing systems used by Regal Medical Group. In that respect, I have extensive experience with

data warehousing, including data warehousing related to telemarketing and autodialers in general. I am familiar with the procedures involved in such practices, and I have personally engaged in data warehousing regarding the compilation of certain lists, including demographic and target audience lists for telemarketing, and have personally repaired defective lists to eliminate improperly formatted and corrupted data.

- 7. I also frequently act as a consultant to companies that engage in the use of autodialers, and I am familiar with their use and procedures, and the technical aspects of that business. In that capacity, I have assembled, configured, maintained, operated all aspects of autodialers, and interfaced with the telecommunications providers through whose networks the autodialers operate.
- 8. I have set up and maintained all aspects of predictive dialers and autodialers, from predictive dialers operating with just three telephone lines to outbound call centers capable of generating over 1 million calls per hour. When building these systems, I have used various software and hardware solutions for predictive and autodialers, both proprietary and open source, and customized those systems for their particular uses. I myself have used and maintained predictive and autodialers, and trained others to do the same.
- 9. Further, I am familiar with the manner in which outbound dial lists are used and maintained. Similarly, I am familiar and have experience with, and know how to use, databases containing cell block identifiers and ported number lists, both of which identify cellular type telephone numbers and are typically used in these industries.
- 10. Over the last twenty-seven (27) years, I have also had extensive experience in a broad range of other areas in the electronic and information technology fields and obtained many certifications such as MCP 4.0, A+, Network+, MCP 2000, MCSA, MCSE, Linux+, I-Net+, Security+, CIW Security Analyst. From the hardware perspective, I have extensive experience in troubleshooting and repairing at the component level, and building various systems for various purposes. I have designed,

built and maintained computer networks in a variety of environments from commercial businesses to very large DoD networks. I have taught approximately 1,000 others the skills to become computer network engineers themselves. I have had extensive experience in dealing with security breaches and hardening computer networks against those breaches. I have handled many computer forensic and E-Discovery matters, including internal investigations in companies, working at the FBI sponsored Regional Computer Forensics Laboratory, and founding a computer forensics and E-Discovery firm over 8 years ago. I have also had extensive experience with the set-up and use of predictive and auto dialers. (See Exhibit A – Resume of Jeffrey A. Hansen).

I have been called to testify in the following civil matters: Craig Casey v. Valley Center Insurance Agency Inc., Case No. 37-2008-00004378-SC-SC-CTL (San Diego Superior Court); Stemple v. QC Holdings, Inc., Case No. 12-CV-1997-CAB-WVG (S.D. Cal.); Hahn v. Massage Envy Franchising, Case No: 3:12-cv-00153-DMS-BGS (S.D. Cal.), Abdeljalil v. General Electric Capital Corporation, Case No: 12-cv-02078-JAH-MDD (S.D. Cal.), Jasminda Webb v. Healthcare Revenue Recovery Group, LLC Case No: C 13-0737 JD (N.D. Cal.), Balschmiter v TD Auto Finance, LLC, Case No: 2:13-cv-01186 (E.D. Wisc.), Jordan Marks v Crunch San Diego, LLC, Case No. 14-CV-0348-BAS (BLM) (S.D.Cal.), Peter Olney v Job.com, Case No: 1:12-cv-01724-LJO-SKO (E.D. Cal.), Carlos Guarisma v ADCAHB Medical Coverages, Inc. and Blue Cross and Blue Shield of Florida, Inc., Case No: 1:13-cv-21016-JLK (S.D. Fla.), Farid Mashiri v Ocwen Loan Servicing, LLC, Case No: 3:12-cv-02838 (S.D. Cal.), Monty J. Booth, Attorney at Law, P.S. v Appstack, Inc., Case No. 2:13-cv-01533-JLR (W.D. Wash.), Rinky Dink, Inc. d/b/a Pet Stop v World Business Lenders, LLC, Case No. 2:14cv-00268-JCC (W.D. Wash.), Michael Reid and Dave Vacarro v. I.C. Sytems, Inc., Case No. 2:12-cv-02661-ROS (D. Ariz.), Jeffrey Molar v NCO Financial Systems Case No. 3:13-cv-00131-BAS-JLB (S.D. Cal.), Latonya Simms v Simply Fashion Stores LTD, and ExactTarget, Inc., Case No. 1:14-CV-00737-WTL-DKL (D. Ind.), Sueann Swaney v

Regions Bank, Case No. CV-13-RRA-0544-S (N.D. Ala.); Hooker v SiriusXM, Case No. 4:13-cv-00003 (AWA) (E.D. Va.), Diana Mey v Frontier Communications, Case No. 13cv-01191-RNC (D. Conn.), Rachel Johnson v Yahoo! Zenaida Calderin v Yahoo! Case No. 14-cv-2028 14-cv-2753 (N.D. IL), Philip Charvat v Elizabeth Valente, Case No. 12cv-5746 (N.D. IL), Robert Zani v Rite Aid Hdqtrs. Corp., Case No. 14-cv-9701(AJN) (RLE)(S.D. NY); A.D. v Credit One Bank Case No. 1:14-cv-10106 (N.D. IL); Oerge Stoba, and Daphne Stoba v Saveology.com, LLC, Elephant Group, Inc., Time Warner Cable, Inc. Case No. 13-cv-2925-BAS-NLS (S.D. Cal.); Shyriaa Henderson v United Student Aid Funds, Inc. Case Number: 3:13-cv-1845-L-BLM (S.D. Cal.); Marciano v Fairwinds Financial Services Case No. 6:15-CV-1907-ORL-41 KRS (M.D. Fla); Alice Lee v Global Tel*Link Corporation Case No. 2:15-cv-02495-ODW-PLA [consolidated with 2:15-cv-03464-ODW-PLA (C.D. Cali); Alan Brinker v Normandin's Case No. 5:14cv-03007-EJD-HRL (N.D. Cali); Spencer Ung v Universal Acceptance Corporation, Case No. 15cv127 RHK/FLN (D. Minn); Seana Goodson v Designed Receivable Solutions, Case No. 2:15-cv-03308-MMM-JPR (C.D. Cal); Dominguez v Yahoo!, Inc., Case No. 2:13-cv-01887 (E.D. Penn)

Work and Analyses in this Case

12. I have reviewed various documents and evidence from this case relating to fax messages sent to Plaintiff, and I have reviewed various other documents relating to the use and regulation of autodialers. Specifically, I have reviewed the following documents: 1) Exhibit B – Federal Communications Commission ("FCC") Order 03-153; 2) Exhibit C - FCC response to ACA; 3) Exhibit D - FCC-15-72A1; 4) Exhibit E - US patent 3,943,289; 5) Exhibit F - US patent 4,933,964; 6) Exhibit G - US Patent 3317678; 7) Exhibit H - ATDS and predictive dialers 1970-1992; 8) Exhibit I - Davox Marketing; 9) Exhibit J - US Patent 3229042; 10) Exhibit K - Xmedius Fax App (Obtained from support.xmedius.com/hc/en-

us/article attachments/208011288/User Instruction Sheet.pdf on September 06, 2016); 11) Exhibit L **XmediusFax** User Guide (Obtained from www.shermancollege.net/itportal/Employees/FAXGuide.pdf on September 06, 2016); 12) **Exhibit** M **XmediusFax** release notes (Obtained from ftp://89.216.33.205/filee/XMediusFAX7.5.0.28-HfTy3mB/Release%20Notes.pdf on September 06, 2016); 13) Exhibit N - Using XmediusFax (Obtained from www.ryerson.ca/content/dam/ccs/Services/Software/Phonesandfax/UsingXMediusFAX/ Using%20XMediusFAX.pdf on September 06, 2016); 14) Exhibit O - Sherman College XmediusFax guide (Obtained from user www.shermancollege.net/itportal/Employees/faxserveruserguide.pdf on September 06, Exhibit P - Xmedius Sending from Outlook (Obtained from blogs.fscj.edu/openpage/files/2012/01/Xmedius-with-Outlook-on-PCs-for-Faxing-Documents.pdf on September 06, 2016); 16) Exhibit Q - Xmedius Admin Guide hcs.net/foip/Sagemcom XMedius Administration Guide.pdf (Obtained from September 06, 2016); 17) Exhibit R - Xmedius Fax Instructions (Obtained from www.swosu.edu/administration/its/facstaff/xmedius-fax-instructions.pdf on September Exhibit S - Virtual Faxing Solution 06, 2016); 18) (Obtained www.office.xerox.com/latest/SO1BR-64U.pdf on September 06, 2016); 19) Exhibit T -XMediusFAX Enterprise (Obtained from www.xmedius.com/wpcontent/uploads/2014/12/XMediusFAX Enterprise edition.pdf on September 06, 2016); 20) **Exhibit** U **XMediusFAX** Using (Obtained from www.ryerson.ca/content/dam/ccs/Services/Software/Phonesandfax/UsingXMediusFAX/ Using%20XMediusFAX.pdf on September 06, 2016); 21) Exhibit V - Sending Faxes: Overview – XMedius Cloud Help Center (Obtained from support.xmedius.com/hc/enus/articles/203824686-Sending-Faxes-Overview on September 06, 2016); 22) Exhibit W - Faxing via Email (Obtained from support.xmedius.com/hc/en-us/articles/221690828 on September 06, 2016); 23) Exhibit X - Faxing via Windows Applications (Obtained

from support.xmedius.com/hc/en-us/articles/221752287 on September 06, 2016); 24) Exhibit Y - Technical Specification Sheet (Obtained from www.xmedius.com/wpcontent/uploads/2014/12/XMediusFAX_Express_edition.pdf on September 06, 2016); 11) Exhibit Z - Document Production Bates Numbers Regal 000176-000665; 12) Exhibit AA - XMediusFAX Enterprise T.38 Fax Over IP Solution (Obtained Oct 3, 2016); **Exhibit** AB adTempus 4 user guide (Obtained from arcanadev.com/adtempus/documentation on Oct 3, 2016); 14) Exhibit AC adtempus30help (Obtained from arcanadev.com/adtempus/documentation on Oct 3, 2016); 15) Exhibit AD – adtempus20help (Obtained from arcanadev.com/adtempus/documentation on Oct 3, 2016); Exhibit AE - Regal's Document Production 160422 (REGAL 000001-000168) (CONFIDENTIAL); Exhibit AF - Document Production Bates Numbers REGAL000170-000175 (Confidential); Exhibit AG - Regal's Response to Rogs; Exhibit AH - Deposition transcript of James Haggard; Exhibit AI - Deposition of Dania Sanchez Pinnick;

Regal Medical Group used Xmedius, which has the capacity to store and dial telephone numbers using a random or sequential number generator

13. I have been retained in part to evaluate whether the telephone dialing system used by Regal Medical Group to send fax messages at issue in this case can perform the functions of an "automatic telephone dialing system" ("ATDS") as defined by the Telephone Consumer Protection Act, 47 U.S.C. § 227. ("TCPA"). According to the FCC:

"The TCPA defines an 'automatic telephone dialing system' as 'equipment which has the capacity (A) to store or produce telephone numbers to be called, using a random or sequential number generator; and (B) to dial such numbers.' The statutory definition contemplates autodialing equipment that either stores or produces numbers. It also provides that, in order to be considered an 'automatic telephone dialing system,' the equipment need only have 'the *capacity* to store or produce telephone numbers (emphasis added)'...."

(See Exhibit B attached hereto - FCC Order 03-153 at \P 131-134).

Within the industry, "Automatic Telephone Dialing System", or "auto-14. dialer" for short, has been attributed to any system with the capacity to automatically dial phone numbers. Naturally, for a system to automatically dial phone numbers, the system must either produce or store those phone numbers. Within the industry, these terms were not applied to systems that would only call one pre-programed number such as a home security system or speed dial, but were applied to systems generally used for telemarketing or call centers. These names have been attributed to these systems for over 50 years. There are different types of "auto-dialers" such as "predictive dialers," "power dialers," dialers that deliver pre-recorded messages (commonly referred to as "voice broadcasting"), dialers that are capable of delivering fax messages to a list of recipients (commonly referred to as "fax broadcasting" or "fax blasting"), dialers to deliver SMS messages (commonly referred to as "SMS blasting"). Within the industry these systems are not defined by any other terms when used in other dialing modes such as manual or preview modes in predictive dialers. The fact that these terms have been used to define auto-dialers for over 50 years can be corroborated or discovered by a few clicks through the Patent Office's website (new patents cite old patents) which yields these historical insights. Because the terms used within the industry are the same as the terms used by the FCC and the TCPA, to clarify my use of the terms in my report, I will point out that when referring to the FCC's or TCPA's definition I will clarify, as I did in the previous paragraph, by stating: "characteristics of an "automatic telephone dialing system" ("ATDS") as defined by the Telephone Consumer Protection Act." Otherwise, when I use these terms, I am using them in the context which they have been used for decades within the industry.

15. Based upon the documents and evidence I have reviewed, the fax messages that Regal Medical Group sent to Plaintiff were made using Xmedius, which is a fax The Xmedius fax system allows for the "broadcasting" or broadcasting system. "blasting" of faxes to a list of recipients. Xmedius is very scalable in that it allows for the broadcasting of faxes using a variety of methods including Openoffice, Outlook, Exchange, command line, python, the Fax Manager dialog within Xmedius. "Fax broadcasting" or "fax blasting" is the ability to send faxes to multiple recipients. (See Exhibit K - Xmedius Fax App; Exhibit L - XmediusFax User Guide pp. 13-34, 39-40, 43-45, 53-86, 105, 110, 111, 116, 129, 139; Exhibit M - XmediusFax release notes p. 8; Exhibit N -Using XmediusFax; Exhibit O - Sherman College XmediusFax user quide; Exhibit P -*Xmedius Sending from Outlook; Exhibit Q - Xmedius Admin Guide pp. 29, 51, 228, 233, 234,* 255, 277-279, 304; Exhibit R - Xmedius Fax Instructions; Exhibit S - Virtual Faxing Solution; Exhibit T - XMediusFAX Enterprise; Exhibit U - Using XmediusFAX; Exhibit V -Sending Faxes Overview - XMedius Cloud Help Center; Exhibit W - Faxing via Email; Exhibit X - Faxing via Windows Applications; Exhibit Y - Technical Specification Sheet; Exhibit Z - Document Production Bates Numbers Regalo00176-000665 pp. Regalo00211, Regal000241, Regal000242, Regal000249 - Regal000257, Regal000339 - Regal000352, Regal000390, Regal000422, Regal000439, Regal000445 - Regal000450, Regal000453, Regal000489 - Regal000492, Regal000557, Regal000560 - Regal000563, Regal000628 -Regal000630; Exhibit AA - XMediusFAX Enterprise T.38 Fax Over IP Solution (obtained Oct 3 2016); Exhibit AE - Regal's Document Production 160422 (REGAL000001-000168) (CONFIDENTIAL) Numbers REGAL000026-REGAL000028, REGAL000033, Bates REGAL000057-REGAL000061, REGAL000075-REGAL000079, REGAL000098-REGAL000102, REGAL000106-REGAL000108; Exhibit AG - Regal's Response to Rogs Responses 3, 4, 6, 12; Exhibit AH - Deposition transcript of James Haggard pp. 41:22-25, 58:19-25, 61:14-15; Exhibit AI - Deposition of Dania Sanchez Pinnick pp. 43:4-8, 84:1-6, 87:16-25, 88:1-25, 89:1)

16. While the Xmedius Fax server stands alone as having the capacity as an "automatic telephone dialing system," Regal Medical Group used adTempus in tandem with the Xmedius Fax Server to function as a single system. AdTempus is a scheduling program for Microsoft Windows. This program allows for the scheduling and automating of tasks utilizing various programs on a Windows computer. Regal Medical Group would enter the fax number into a program called ezCap which interfaced with another program called Access Express. Access Express used automated scripts to automate the process of approving authorizations. The approved authorizations which are destined for fax are automatically sent to the Xmedius Fax Server by the adTempus program. At no time in the process is a human being involved in the selecting phone numbers to send faxes to or the process of sending faxes, but instead adTempus automates the selecting phone numbers from Access Express and sending the fax requests to the Xmedius Fax Server. The Xmedius Fax Server has the ability to select phone numbers, from a list, and automatically dial those numbers to that list of numbers. Xmedius in combination with adTempus also has the ability to select phone numbers from a list and dial those numbers. In this case, not only do the systems have the capacity of an "automatic telephone dialing system," but they are being used by Regal Medical Group to automatically dial telephone numbers and deliver a message. (See Exhibit AB - adTempus 4 user quide; Exhibit AC - adtempus30help; Exhibit AD adtempus20help; Exhibit AF - Regal's Document Production 160719 (REGAL000170-000175) (CONFIDENTIAL) Bates Number REGAL000170; Exhibit AH - Deposition transcript of James Haggard pp. 20:24-25, 21:1-12, 25:8-25, 26:1-9, 27:1-25, 28:1-25, 30:11-17, 31:12-15, 32:10:12, 33:11-13, 35:6-11, 39:24-25, 40:1-25, 41:1-13, 41:22-25, 43:3-11, 45:8-25, 46:1-2, 54:15-21, 56:10-25, 57:1-2, 61:11-12, 79:9-12, 79:22-25, 80:1-25, 81:1-25, 82:1-11; Exhibit AI - Deposition of Dania Sanchez Pinnick pp. 29:16-24, 30:21-24, 37:1-13, 42:10-15, 43:4-8, 47:1-25, 48:1-25, 49:1-25, 50:1-13, 62:12-22, 64:17-25, 65:1-2, 75:1-15, 76:19-25, 77:1-9 84:1-6, 87:16-25, 88:1-25, 89:1)

- 17. The automated nature of Regal Medical Groups dialing of fax numbers and delivering faxes can be demonstrated by the fact that they do no know how to stop a fax broadcast. (*See Exhibit AI Deposition of Dania Sanchez Pinnick p. 73:10-15*) It is also demonstrated by faxes being sent throughout the night when employees are not present, (*See Exhibit AI Deposition of Dania Sanchez Pinnick pp. 68:1-15*, 69:16-22, 71: 15-25, 72: 1-5)
- Autodialers have been marketed and used for five decades. 18. The earlier autodialers were intended to deliver a pre-recorded message and during the 1970's to the present predictive dialers were used to call lists of numbers organized as "campaigns." The newest type of autodialer is one that delivers SMS messages which operates exactly like the earliest autodialers which left pre-recorded messages. Autodialers that deliver fax messages operate exactly like the earliest autodialers which left pre-recorded messasges. With autodialers that deliver pre-recorded messages, autodialers that deliver SMS messages and autodialers that deliver fax messages, a list of numbers is either created or stored, the operator selects a list of phone numbers, assigns it to a "campaign," and instructs the autodialer to call the list of numbers delivering either a pre-recorded message or an SMS message. Some autodialers simplified that process further and allow the broadcasting of messages using either an email client or an interface resembling an email client such as the system used by Defendant. (See Exhibit *K* - *Xmedius Fax App*)
- 19. For many years I have used the example of email blasting to explain autodialers that deliver SMS messages, pre-recorded messages or faxes because 1.) most people have sent emails to multiple recipients 2.) they operate the same way and 3.) If needed, I could lead them through the screens over the phone as they have the software already. In all cases an operator will create a list of contacts, load the contacts into a program, and instruct the program to send a message to the entire list of contacts by automating the process of establishing a connection with those contacts (by dialing or

sending through email servers and SMS Gateways). In fact the Xmedius Fax Server is being used by Regal Medical Group's Microsoft Exchange email server to function exactly the same way as any email program. (*See Exhibit AH - Deposition transcript of James Haggard p. 61:14*)

- 20. Autodialers work with the same principle, they automatically dial (or establish a connection to the recipient) and deliver a message. They are used to leverage time and allow a single operator to deliver a message to more people than using a non-automated solution. For example, with a single predictive dialer, I was able to deliver messages to a few thousand people per day (dependent on ring times, number of agents and number of phone lines). With pre-recorded messages, I was able to deliver up to 1 million messages per hour (dependent on number of phone lines). Fax blasting applications, such as the one used by Defendant, have no live agents and have about the same performance as autodialers that deliver pre-recorded messages.
- 21. All autodialers, to some degree, require "human intervention." When I was administrator for autodialers, it was a full time job. Tweaking dialer settings, creating lists, loading lists, creating the message, starting the dialer all are part of operating the autodialer. Like all machines, they don't maintain and operate themselves. However, by automating the process of establishing contact with recipients ("dialing") a single person can deliver a message to thousands or millions of people every day; something that is humanly impossible without automated means.
- 22. The term "Predictive dialer" is a technical term used to describe the type of dialing system. Although, Predictive dialers are different than systems that deliver fax messages in how and for what purpose they deliver a message, their basic functionality is still the same: to store a list of numbers, automatically dial them and once connected deliver a message which is how autodialers have been defined in the industry for decades. Predictive dialers all work under the same guiding principle: they transfer telephone numbers to be called to a list or "campaign." This list of numbers is then

dialed without human intervention. The calls are made, using multiple telephone lines, in advance of being connected to a live operator. Using a complex computer algorithm, the dialing system will "predict" how far in advance to make the calls in attempt to prevent time wasted in listening to rings, answering machines, disconnected phone numbers and calls that are not answered. This functionality has not changed since Davox marketed their predictive dialers in the 1980's. (*See Exhibit I - Davox Marketing*)

The term "Predictive dialer" was not created by the FCC in their 2003 23. Order. Nor was the term "automatic telephone dialing system" created by Congress. These are terms that have been used to describe such equipment, by those in the industry for decades. Norman A. Sheldon filed a patent (Exhibit E - US patent 3,943,289) on July 12, 1974 for what he called a "automatic telephone dialing system" (Exhibit E - US patent 3,943,289 page 4 column 2 line 63) which dialed numbers from a sequential number generator and delivered pre-recorded messages to telephone subscribers. He chose to use a sequential number generator because at that time computer storage was very expensive (*Exhibit E - US patent 3*,943,289 page 4 column 2 lines 2-11). Although he chose to use a sequential number generator, stored lists of numbers had been used for many years prior to his patent. (See Exhibit J - US Patent 3229042; Exhibit G - US Patent 3317678) In July 25, 1989, Bassem M. Girgis filed a patent (Exhibit F - US patent 4,933,964) for a "predictive outbound dialing system" (Exhibit F - US patent 4,933,964 page 19 column 2 line 53) which used an "input call list" (Exhibit F - US patent 4,933,964 figure 3) stored in the system to call those numbers in advance predicting when a live agent would be available using a predictive algorithm. This system was designed to call out on more lines than available agents from a list of numbers, listen for rings, busy, and answered calls, and connect the calls to agents by predicting when they would be available. This is the precise capability of the Predictive dialers used today. The functionality of the autodailers and predictive dialers has not changed since long before the TCPA until now with the exception that modern dialers

can make more calls in a shorter period of time. Attached as Exhibit H are examples of articles and job postings illustrating that the exact same type of equipment was used over the last four decades, along with the terms "Automatic Telephone Dialing System" and "Predictive Dialer," long before Congress or the FCC considered the equipment. (*See Exhibit H - ATDS and predictive dialers 1970-1992; also see Exhibit C - FCC response to ACA pp. 13-14 footnote 3*) The equipment described in the TCPA and the FCC 2003 Order have precisely the same characteristics as the equipment that is in use today.

24. The fact that Regal Medical Group's system places calls to numbers stored by the system and delivers fax messages indicates that the system has the capacity to dial phone numbers without human intervention, as it relates to predictive dialers, as clarified in the FCC's 2003 Order:

The record demonstrates that a predictive dialer is equipment that dials numbers and, when certain computer software is attached, also assists telemarketers in predicting when a sales agent will be available to take calls. The hardware, when paired with certain software, has the capacity to store or produce numbers and dial those numbers at random, in sequential order, or from a database of numbers. As commenters point out, in most cases, telemarketers program the numbers to be called into the equipment, and the dialer calls them at a rate to ensure that when a consumer answers the phone, a sales person is available to take the call. The principal feature of predictive dialing software is a timing function, not number storage or generation. ...[T]hese machines are not conceptually different from dialing machines without the predictive computer program attached."

. . . .

The TCPA defines an "automatic telephone dialing system" as "equipment which has the capacity (A) to store or produce telephone numbers to be called, using a random or sequential number generator; and (B) to dial such numbers." The statutory definition contemplates autodialing equipment that either stores or produces numbers. It also provides that, in order to be considered an "automatic telephone dialing system," the equipment need only have the "capacity to store or produce telephone numbers (emphasis added). . .." It is clear from the statutory language and the legislative history that Congress anticipated that the FCC, under its TCPA rulemaking authority, might need to consider changes in technologies. In the past, telemarketers may have used dialing equipment to create and dial 10-digit telephone numbers arbitrarily. As one commenter points out, the evolution

of the teleservices industry has progressed to the point where using lists of numbers is far more cost effective. The basic function of such equipment, however, has not changed—the capacity to dial numbers without human intervention. We fully expect automated dialing technology to continue to develop.

. . . .

[T]o exclude from these restrictions equipment that use predictive dialing software from the definition of 'automated telephone dialing equipment' simply because it relies on a given set of numbers would lead to an unintended result. ...We believe the purpose of the requirement that equipment have the 'capacity to store or produce telephone numbers to be called' is to ensure that the prohibition on autodialed calls not be circumvented. Therefore, the Commission finds that a predictive dialer falls within the meaning and statutory definition of 'automatic telephone dialing equipment' and the intent of Congress.

(Exhibit B - FCC Order 03-153 ¶¶ 131-134 (finding that a predictive dialer falls within the TCPA's definition of "automatic telephone dialing system").)

25. Additionally, the properties of the dialing system have the precise capabilities of dialing without human intervention as further clarified by FCC Order 12-56 (May 21, 2012), wherein, the FCC stated:

Under the TCPA, the term "automatic telephone dialing system" is defined as "equipment which has the capacity (A) to store or produce telephone numbers to be called, using a random or sequential number generator; and (B) to dial such numbers." *Id.* at § 227(a)(1). The Commission has emphasized that this definition covers any equipment that has the specified capacity to generate numbers and dial them without human intervention whether or not the numbers called are randomly or sequentially generated or come from calling lists.

Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991, CG Docket No. 02-278, Report and Order, 18 FCC Rcd. 14014 at 14092 ¶ 133 (2003).

26. Thus, in my expert opinion, the dialing system (as outlined above) has the capacity to generate numbers and dial them without human intervention as contemplated by the TCPA and clarified by the FCC, because the system has the capacity to store

numbers in a list and dial them without human intervention and also have the capacity to generate numbers from a list for dialing without human intervention.

27. As stated above, the FCC relies upon the following definition of an "automatic telephone dialing system":

The TCPA defines an "automatic telephone dialing system" as "equipment which has the capacity (A) to store or produce telephone numbers to be called, using a random or sequential number generator; and (B) to dial such numbers." The statutory definition contemplates autodialing equipment that either stores or produces numbers. It also provides that, in order to be considered an "automatic telephone dialing system," the equipment need only have "the capacity to store or produce telephone numbers (emphasis added)…."

(*See Exhibit B - FCC Order 03-153 at* ¶ *132*). This definition is consistent with the definition used by those in the industry long before adopted by Congress or the FCC. (*See Exhibit E - US patent 3,943,289, Exhibit F - US patent 4,933,964, Exhibit H - ATDS and predictive dialers 1970-1992, Exhibit I - Davox Marketing, Exhibit J - US Patent 3229042, Exhibit G - US Patent 3317678*) Simply stated, those in the industry gave descriptive names to these systems based on the capabilities of the system: "Automatic Telephone Dialing System" or "autodialer" for short is the name given to anything that is capable of automatically dialing telephone numbers, "predictive dialer" was given to an autodialer that is capable of automatically dialing those numbers in a predictive manner, and "voice broadcast" given to an autodialer that can broadcast voice messages in the form of pre-recorded messages. "SMS messaging systems," "SMS broadcasting system," and "SMS Blasting systems" are attributed to autodialers that can send SMS messages to a list of numbers and "Fax Blasting System" or "Fax Broadcasting System" was attributed to autodialers that deliver fax messages.

- 28. Even more recently, on July 10, 2015, the FCC issued a Declaratory Ruling and Order in which the FCC clarified the term "capacity." (*See Exhibit L In the Matter of Rules & Regulations Implementing the Tel. Consumer Prot. Act of 1991*, 30 F.C.C. Rcd. 7961, at ¶¶ 10-24 (2015) (hereinafter the "2015 Order").
- In light of the FCC's July 10, 2015 Declaratory Ruling and Order in which 29. the FCC takes a broad definition of "capacity" as it relates to autodialing numbers and the generation of numbers, I would point out that making a computer generate a list of 10 digit numbers "out of thin air", is a relatively trivial task. All computers can generate random or sequential numbers. A computer system simply cannot operate without the ability to do so. A "pseudo random number generator" is a key element in allowing a computer to "compute." Computers are designed to do math and counting i.e. "to compute." For example, typing "seq 6192486000 6192486999 > sequential_numbers_to_call.txt" creates a list of 1000 Sprint Wireless Numbers to be called (this was done on my regular laptop with no additional software installed). In other words, my laptop running Linux has natively installed a "sequential number generator" that can produce a list of phone numbers. Windows computers have a similar command line function as well. Typing "for /L %i in (2480000,1,2489999) do @echo 619%i >> sequential numbers to call.txt" generates the same list on a Windows computer. The easiest for the novice user would be to simply use the "seq" command illustrated above, the Windows equivalent illustrated above, a loop in bash, /dev/random, or /dev/urandom. There are many additional ways to generate random or sequential numbers. The following is a small example:
 - awk -v min=6192480000 -v max=6192489999 'BEGIN{srand(); print int(min+rand()*(max-min+1))}'
 - shuf -i 6192480000-6192489999 -n 1000 > sprint_numbers.txt
 - python -c "import random; print random.randint(6192480000,6192489999)"
 - counter=6192480000while [\$counter -le 6192489999]

do
echo \$counter
((counter++))
done

- perl -le 'print 6192480000+int(rand(1000)) for(1..1000)' > sprint_numbers.txt
- Computers' ability to "compute" is completely dependent on their ability to 30. generate numbers. Computers simply would not function without the ability to do so. Not only can the operating system be used to generate numbers, but all programing languages that I have seen rely on the ability to generate numbers. One of the most common programming functions, in all languages, is a loop. For example, to generate that same list of Sprint wireless sequential numbers a simple loop in the PHP script is all that is needed: "for (\$i = 6192480000; \$i < 6192490000; \$i++)." One of the examples above is a bash loop. In both examples, the loop is starting at 6192480000 and counting in increments of 1 until reaching 6192489999. Computers are completely dependent on their ability to count. For example, a predetermined period of time is set between program updates such as an anti-virus. A loop would be used to count units of time until a number is reached before attempting another update. When going to a website, the web browser is instructed to wait before giving up on displaying the page. That wait period is also a loop in which the computer counts increments of time. This can be seen in any autodialer, as they have timers that run for various timeout periods. This can also be seen in a Tempus' ability to schedule tasks. The generation of random numbers is just as important and as common a task in computer programming as the generation of sequential numbers. The most obvious use is cryptography and certain numerical algorithms, but many other operations need a modest amount of unpredictability. Some simple examples might be to present a user with a "Random Quote of the Day", or determining which way a computer-controlled adversary might move in a computer game. Weaker forms of randomness are used in hash algorithms and in creating amortized searching and sorting algorithms.

- 31. The Xmedius Fax server used by Regal Medical Group runs on Windows. (*See Exhibit Z Document Production Bates Numbers Regal 000176-000665 Bates Numbers Regal000569 Regal000576; Exhibit AG Regal's Response to Rogs Response Number 6*) Of course, storage of numbers does not discriminate on how the numbers were produced as computer storage can store any kind of data regardless of how it was produced whether loaded from a list of known numbers or a list of sequentially generated numbers. (*See Exhibit M -* FCC Resp. Br. at. 6, 12, 13, 24, 36, 37, 38, 39, 40, 41, 42, 43, 45, 46, 47, 48, 49, 52).
- 32. The operating system is not the only way to generate sequential numbers. The Xmedius system uses Python scripts to automate some tasks such as loading a list of numbers to be called and delivering a fax message. (See Exhibit Q Xmedius Admin Guide pp. 237-256). One of the examples above, was using a loop in Python. Of course, storage of numbers does not discriminate on how the numbers were produced as computer storage can store any kind of data regardless of how it was produced whether loaded from a list of known numbers or a list of sequentially generated numbers. (See Exhibit C FCC response to ACA pp. 6, 12, 13, 24, 36, 37, 38, 39, 40, 41, 42, 43, 45, 46, 47, 48, 49, 52)
- 33. The FCC's orders and rulings provide me with the information that assists me in identifying and describing features of Regal Medical Group's dialing system. Based on those orders and rulings, based upon my review of the documents and evidence provided in this case, based on my knowledge of computer storage and computer processing and based on my knowledge of autodialers and predictive dialers, it is also my expert opinion that all of the fax messages sent by Regal Medical Group to Plaintiff were made using a "fax blasting system" that has the capacity to store or produce numbers to be called, using a random or sequential number generator and to dial those numbers, all without human intervention.
- 34. Analyzing the Xmedius system was a technical process. To satisfy the question of whether or not the system has the technical capabilities described in the

FCC's clarification of the TCPA in the 2003 and 2015 Reports, I had to investigate what the dialing equipment is capable of doing, and using my knowledge of autodialers,

determine if in fact those capabilities are indeed those defined in the 2003 and 2015

FCC orders.

Additionally, no other physical inspection was required in determining the 35.

capabilities of this system. The physical attributes of the systems have nothing to do

with the functionality of the system. A physical inspection of these systems would not

show anything more than a standard computer in which I have over two decades of

experience with.

In this case, the Xmedius system has the capacity to store numbers in a

database, generate numbers for inclusion in a calling list, and call those numbers without

human intervention. All that was required was a technical review process to determine

if the system had such capabilities.

I reserve the right to amend, modify or supplement the statements and 37.

opinions set forth herein as appropriate.

I declare that the foregoing is true and correct, subject to the laws of perjury 38.

of the United States.

Executed in Spring Valley, CA on this 3rd day of October 2016.

Jeffrey A. Hansen

TABLE OF EXHIBITS

- Exhibit A Resume of Jeffrey Hansen
- Exhibit B FCC Order 03-153
- Exhibit C FCC response to ACA
- Exhibit D FCC-15-72A1
- Exhibit E US patent 3943289
- Exhibit F US patent 4933964
- Exhibit G US Patent 3317678
- Exhibit H ATDS and predictive dialers 1970-1992
- Exhibit I Davox Marketing
- Exhibit J US Patent 3229042
- Exhibit K Xmedius Fax App
- Exhibit L XmediusFax User Guide
- Exhibit M XmediusFax release notes
- Exhibit N Using XmediusFax
- Exhibit O Sherman College XmediusFax user guide
- Exhibit P Xmedius Sending from Outlook
- Exhibit Q Xmedius Admin Guide
- Exhibit R Xmedius Fax Instructions
- Exhibit S Virtual Faxing Solution
- Exhibit T XMediusFAX Enterprise
- Exhibit U Using XMediusFAX
- Exhibit V Sending Faxes Overview XMedius Cloud Help Center
- Exhibit W Faxing via Email
- Exhibit X Faxing via Windows Applications

Exhibit Y - Technical Specification Sheet

Exhibit Z - Document Production Bates Numbers Regal 000176-000665

Exhibit AA - XMediusFAX Enterprise T.38 Fax Over IP Solution (obtained Oct 3 2016)

Exhibit AB - adTempus 4 user guide

Exhibit AC - adtempus30help

Exhibit AD - adtempus20help

Exhibit AE - Regal's Document Production 160422 (REGAL 000001-000168) (CONFIDENTIAL)

Exhibit AF - Document Production Bates Numbers REGAL000170-000175 (Confidential)

Exhibit AG - Regal's Response to Rogs

Exhibit AH - Deposition transcript of James Haggard

Exhibit AI - Deposition of Dania Sanchez Pinnick